

What is claimed is:

1. A composition comprising:
a polyolefin prepared by the metathesis of an olefin monomer using a ruthenium or osmium carbene catalyst; and
5 one or more toughness and/or hardness modulators.
2. The composition of claim 1 wherein the polyolefin is poly-DCPD.
3. The composition of claim 1 wherein the one or more toughness modulators comprises a silicone.
4. The composition of claim 3 wherein the silicone is a polysiloxane.
- 10 5. The composition of claim 4 wherein the polysiloxane is a poly(dimethylsiloxane) or a poly(diphenylsiloxane).
6. The composition of claim 2 wherein the one or more toughness modulators is present in an amount between about 0.1% and about 20% by weight of the olefin monomer.
- 15 7. The composition of claim 6 wherein the one or more toughness modulators is present in an amount between about 0.5% and about 10% by weight of the olefin monomer.
8. The composition of claim 7 wherein the one or more toughness modulators is present in an amount between about 1% and about 5% by weight of the
20 olefin monomer.
9. The composition of claim 1 wherein the one or more hardness modulators comprises polybutadiene or polyisoprene.
10. The composition of claim 1 wherein the one or more hardness modulators is a plasticizer.
- 25 11. The composition of claim 11 wherein the plasticizer is dioctyl phthalate.
12. The composition of claim 1 wherein the one or more hardness modulators comprises a carboxylic acid or a salt thereof.

13. The composition of claim 1 wherein the one or more hardness modulators comprises a co-monomer selected from the group consisting of norbornene, cyclooctadiene, cyclohexenylnorbornene, norbornadiene, cyclopentene and methylcyclopentene.

5 14. The composition of claim 2 wherein the one or more hardness modulators is present in an amount between about 0.1% and about 60% by weight of the olefin monomer.

15 15. The composition of claim 14 wherein the one or more hardness modulators is present in an amount between about 1% and about 20% by weight of the olefin monomer.

16. The composition of claim 15 wherein the one or more hardness modulators is present in an amount between about 2% and about 10% by weight of the olefin monomer.

15 17. The composition of claim 1 further comprising one or more density modulators.

18. An article of manufacture comprising:
SUB B2 a polyolefin prepared by the metathesis of an olefin monomer using a ruthenium or osmium carbene catalyst; and
one or more toughness and/or hardness modulators.

20 19. The article of manufacture of claim 18 wherein the article is a molded part.

20. The article of manufacture of claim 19 wherein the polyolefin is poly-DCPD.

25 21. The article of manufacture of claim 18 further comprising one or more density modulators.

22. The article of manufacture of claim 20 wherein the molded part is a golf club head.

23. The article of manufacture of claim 20 wherein the molded part is a golf club shaft.

24. The article of manufacture of claim 20 wherein the molded part is a baseball bat.

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